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Find the *National Instruments SH200LFH-4xDB50F-S* at our website: ***Click HERE***

INSTALLATION INSTRUCTIONS
LFH200 Cable

このドキュメントには、日本語ページも含まれています。

This guide describes how to use the National Instruments LFH200 cable to connect the NI PXI-2569/2570/2571/2575 or SCXI-1169/1175 switch module to your system.

The LFH200 cable is available in three configurations:

- SH200LFH-4xDB50F-C—Recommended for use with the PXI-2569/2570/2571 or SCXI-1169.
- SH200LFH-4xDB50F-S—Recommended for use with the PXI-2575 or SCXI-1175.
- SH200LFH-BARE WIRE—Recommended for termination other than 50-pin female D-SUB.

Caution The LFH200 cable has a maximum voltage rating of 60 VDC. When using the LFH200 cable with switch modules, do *not* exceed 60 VDC.

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NATIONAL INSTRUMENTS

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Conventions

The following conventions are used in this guide:

»	The » symbol leads you through nested menu items and dialog box options to a final action. The sequence **Options»Settings»General** directs you to pull down the **Options** menu, select the **Settings** item, and select **General** from the last dialog box.
	This icon denotes a note, which alerts you to important information.
	This icon denotes a caution, which advises you of precautions to take to avoid injury, data loss, or a system crash.
bold	Bold text denotes items that you must select or click in the software, such as menu items and dialog box options. Bold text also denotes parameter names.
italic	Italic text denotes variables, emphasis, a cross-reference, or an introduction to a key concept. Italic text also denotes text that is a placeholder for a word or value that you must supply.
`monospace`	Text in this font denotes text or characters that you should enter from the keyboard, sections of code, programming examples, and syntax examples. This font is also used for the proper names of disk drives, paths, directories, programs, subprograms, subroutines, device names, functions, operations, variables, filenames, and extensions.

Getting Started

The following items are necessary for connecting the LFH200 cable:

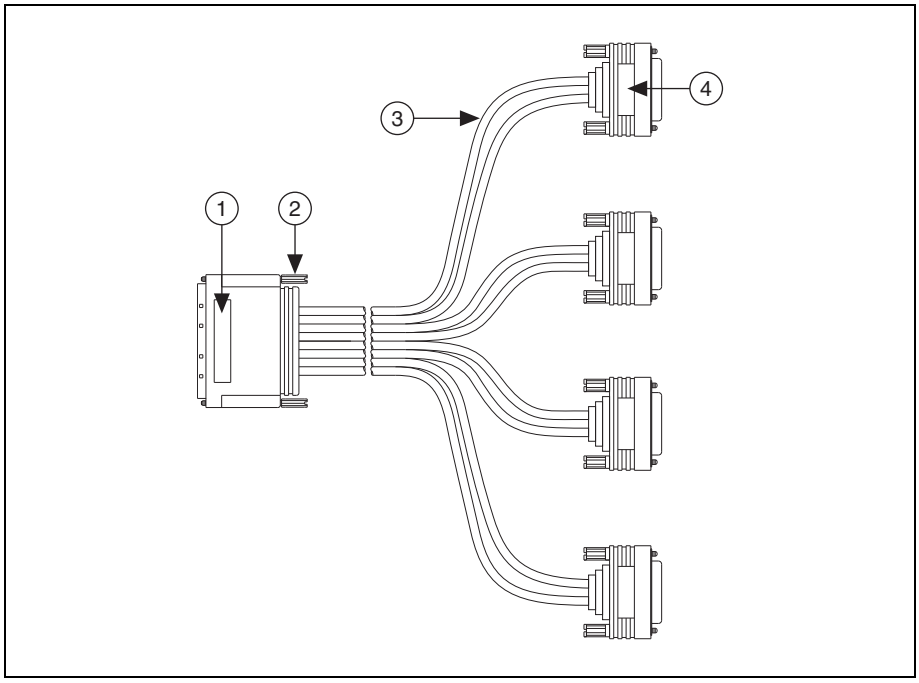
- ❑ LFH200 cable
- ❑ NI PXI-2569/2570/2571/2575 or SCXI-1169/1175 switch module and documentation

Connecting the LFH200 Cable

Complete the following steps to connect the LFH200 cable to your switch module and application. Refer to Figures 1 and 2 for illustrations of the LFH200 cable.

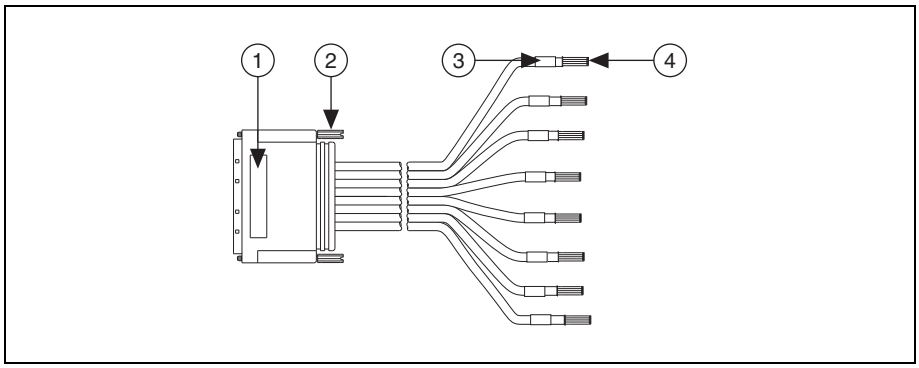
1. Connect the LFH200 connector to the connector on the switch module.
2. Tighten the thumbscrews.
3. Complete either of the following steps, and refer to Tables 1 through 16 to determine how to connect your signals.
   - Connect the D-SUB connectors to your application.
   - Connect the unterminated wires to your application.

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1	LFH200 Connector	3	Cable Leg Label
2	Thumbscrews	4	50-Pin Female D-SUB Connectors

Figure 1. SH200LFH-4xDB50F-C or SH200LFH-4xDB50F-S Cable



1	LFH200 Connector	3	Cable Leg Label
2	Thumbscrews	4	25 Unterminated, Tinned, and Stripped Wires

Figure 2. SH200LFH-BARE WIRE Cable

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Connectors

The cable in this kit connects an LFH200 connector to four, 50-pin female D-SUB connectors marked P1–P4, or eight bundles, leg J0–J7, of unterminated, tinned, and stripped wires. The LFH200 connector provides connection to the switch module. The 50-pin female D-SUB connectors and unterminated wires provide connection to your application. Figures 3 and 4 show the pinouts for these connectors.

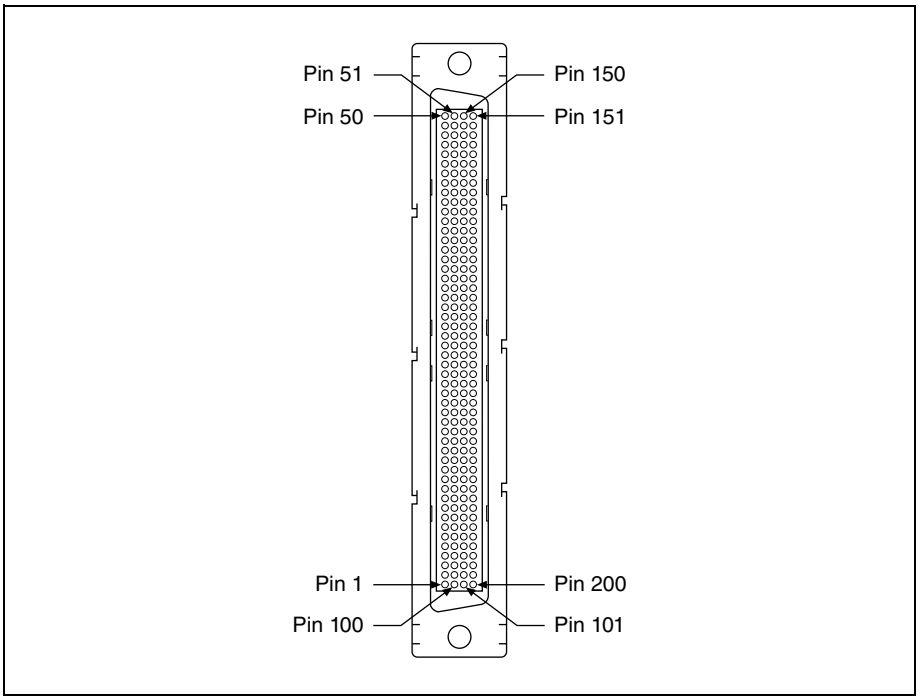


Figure 3. LFH200 Connector

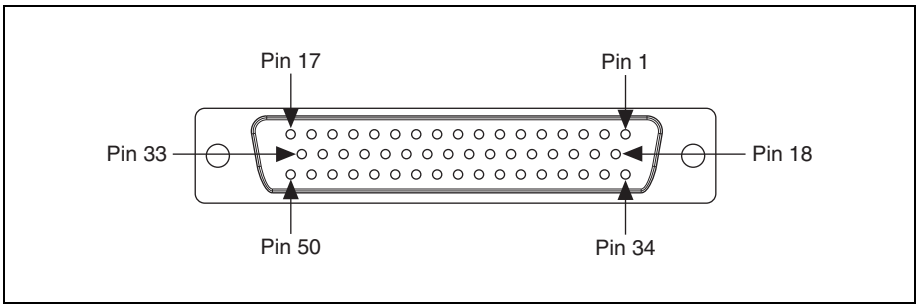


Figure 4. 50-Pin Female D-SUB Connector

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Cable Configurations

The LFH200 cable is available in three configurations:

- SH200LFH-4xDB50F-C
- SH200LFH-4xDB50F-S
- SH200LFH-BARE WIRE

The following sections describe each of the LFH200 cable configurations.

SH200LFH-4xDB50F-C Cable

The SH200LFH-4xDB50F-C cable is recommended for connecting the PXI-2569/2570/2571 or SCXI-1169 to your system. One end of the cable terminates with an LFH200 connector which connects to the switch module. The other end of the cable terminates with four 50-pin female D-SUB connectors.

When using the SH200LFH-4xDB50F-C cable with the PXI-2569 or SCXI-1169, each Channel and its corresponding Common form a twisted pair. For example, CH0 is paired with COM0, and CH1 is paired with COM1. Figure 5 illustrates how this pairing relates to the pins on the PXI-2569 or SCXI-1169.

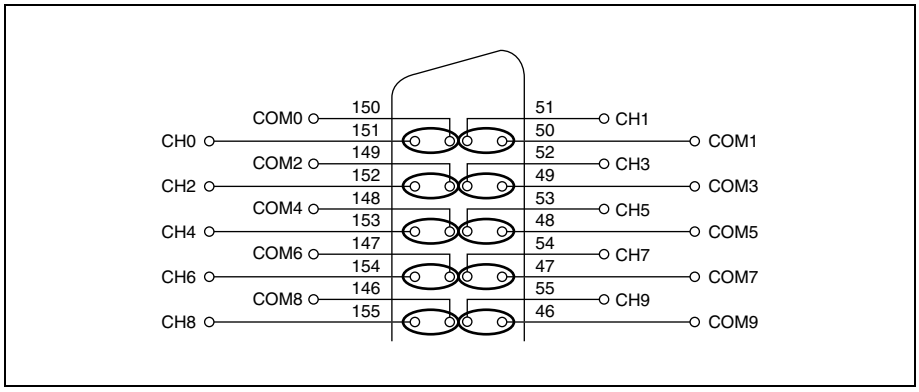


Figure 5. Twisted Pair Groupings for the PXI-2569 or SCXI-1169

When using the SH200LFH-4xDB50F-C cable with the PXI-2570, each Channel and its corresponding NO (Normally Open) connection form a twisted pair. The NC (Normally Closed) connection is twisted with NO CONNECT wires. For example, COM0 is twisted with NO0, and NC0 is twisted with a NO CONNECT wire. Figure 6 illustrates how this pairing relates to the pins on the PXI-2570.

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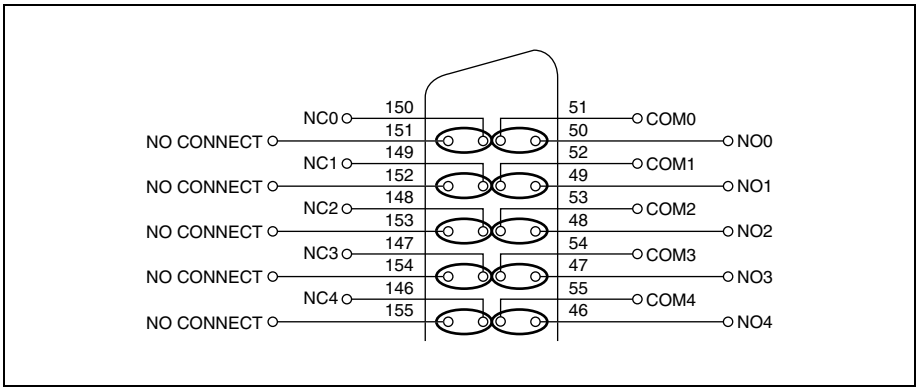


Figure 6. Twisted Pair Groupings for the PXI-2570

When using the SH200LFH-4xDB50F-C cable with the PXI-2571 the twisted pairs vary depending on the channel. For the first 50 Channels, each COM and its corresponding NO connection form a twisted pair. However, for the remaining 16 channels, the three components (NC, COM, and NO) are each twisted with a NC component from the first 50 Channels. For example, COM0 is twisted with NO0, and NC0 is twisted with NC50. COM1 is twisted with NO1, and NC1 is twisted with COM50. COM2 is twisted with NO2, and NC2 is twisted with NO50. Figure 7 illustrates how this pairing relates to the pins on the PXI-2571.

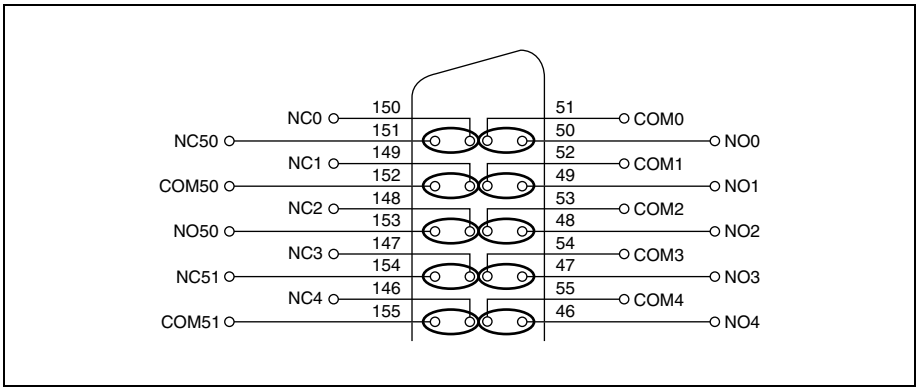


Figure 7. Twisted Pair Groupings for the PXI-2571

Refer to the *NI Switches Help* for a complete listing of channel names and pinouts.

The following tables list the pin assignments for the SH200LFH-4xDB50F-C cable.

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Table 1. Pin Assignment for SH200LFH-4xDB50F-C P1

50-Pin D-SUB P1				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
26	50	COM49	NO24	NO24
27	48	COM47	NO23	NO23
28	46	COM45	NO22	NO22
29	44	COM43	NO21	NO21
30	42	COM41	NO20	NO20
31	40	COM39	NO19	NO19
32	38	COM37	NO18	NO18
33	36	COM35	NO17	NO17
34	34	COM33	NO16	NO16
35	19	COM31	NO15	NO15
36	21	COM29	NO14	NO14
37	23	COM27	NO13	NO13
38	25	COM25	NO12	NO12
39	27	COM23	NO11	NO11
40	29	COM21	NO10	NO10
41	31	COM19	NO9	NO9
42	33	COM17	NO8	NO8
43	16	COM15	NO7	NO7
44	14	COM13	NO6	NO6
45	12	COM11	NO5	NO5
46	10	COM9	NO4	NO4
47	8	COM7	NO3	NO3
48	6	COM5	NO2	NO2
49	4	COM3	NO1	NO1
50	2	COM1	NO0	NO0

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Table 1. Pin Assignment for SH200LFH-4xDB50F-C P1 (Continued)

50-Pin D-SUB P1				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
51	1	CH1	COM0	COM0
52	3	CH3	COM1	COM1
53	5	CH5	COM2	COM2
54	7	CH7	COM3	COM3
55	9	CH9	COM4	COM4
56	11	CH11	COM5	COM5
57	13	CH13	COM6	COM6
58	15	CH15	COM7	COM7
59	17	CH17	COM8	COM8
60	32	CH19	COM9	COM9
61	30	CH21	COM10	COM10
62	28	CH23	COM11	COM11
63	26	CH25	COM12	COM12
64	24	CH27	COM13	COM13
65	22	CH29	COM14	COM14
66	20	CH31	COM15	COM15
67	18	CH33	COM16	COM16
68	35	CH35	COM17	COM17
69	37	CH37	COM18	COM18
70	39	CH39	COM19	COM19
71	41	CH41	COM20	COM20
72	43	CH43	COM21	COM21
73	45	CH45	COM22	COM22
74	47	CH47	COM23	COM23
75	49	CH49	COM24	COM24

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Table 2. Pin Assignment for SH200LFH-4xDB50F-C P2

50-Pin D-SUB P2				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
126	50	COM48	NC24	NC24
127	48	COM46	NC23	NC23
128	46	COM44	NC22	NC22
129	44	COM42	NC21	NC21
130	42	COM40	NC20	NC20
131	40	COM38	NC19	NC19
132	38	COM36	NC18	NC18
133	36	COM34	NC17	NC17
134	34	COM32	NC16	NC16
135	19	COM30	NC15	NC15
136	21	COM28	NC14	NC14
137	23	COM26	NC13	NC13
138	25	COM24	NC12	NC12
139	27	COM22	NC11	NC11
140	29	COM20	NC10	NC10
141	31	COM18	NC9	NC9
142	33	COM16	NC8	NC8
143	16	COM14	NC7	NC7
144	14	COM12	NC6	NC6
145	12	COM10	NC5	NC5
146	10	COM8	NC4	NC4
147	8	COM6	NC3	NC3
148	6	COM4	NC2	NC2
149	4	COM2	NC1	NC1
150	2	COM0	NC0	NC0
151	1	CH0	—	NC50

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Table 2. Pin Assignment for SH200LFH-4xDB50F-C P2 (Continued)

50-Pin D-SUB P2				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
152	3	CH2	—	COM50
153	5	CH4	—	NO50
154	7	CH6	—	NC51
155	9	CH8	—	COM51
156	11	CH10	—	NO51
157	13	CH12	—	NC52
158	15	CH14	—	COM52
159	17	CH16	—	NO52
160	32	CH18	—	NC53
161	30	CH20	—	COM53
162	28	CH22	—	NO53
163	26	CH24	—	NC54
164	24	CH26	—	COM54
165	22	CH28	—	NO54
166	20	CH30	—	NC55
167	18	CH32	—	COM55
168	35	CH34	—	NO55
169	37	CH36	—	NC56
170	39	CH38	—	COM56
171	41	CH40	—	NO56
172	43	CH42	—	NC57
173	45	CH44	—	COM57
174	47	CH46	—	NO57
175	49	CH48	—	NC58

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Table 3. Pin Assignment for SH200LFH-4xDB50F-C P3

50-Pin D-SUB P3				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
101	50	COM98	—	NC49
102	48	COM96	—	NC48
103	46	COM94	—	NC47
104	44	COM92	—	NC46
105	42	COM90	—	NC45
106	40	COM88	—	NC44
107	38	COM86	—	NC43
108	36	COM84	—	NC42
109	34	COM82	—	NC41
110	19	COM80	—	NC40
111	21	COM78	NC39	NC39
112	23	COM76	NC38	NC38
113	25	COM74	NC37	NC37
114	27	COM72	NC36	NC36
115	29	COM70	NC35	NC35
116	31	COM68	NC34	NC34
117	33	COM66	NC33	NC33
118	16	COM64	NC32	NC32
119	14	COM62	NC31	NC31
120	12	COM60	NC30	NC30
121	10	COM58	NC29	NC29
122	8	COM56	NC28	NC28
123	6	COM54	NC27	NC27
124	4	COM52	NC26	NC26
125	2	COM50	NC25	NC25
176	1	CH50	—	COM58

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Table 3. Pin Assignment for SH200LFH-4xDB50F-C P3 (Continued)

50-Pin D-SUB P3				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
177	3	CH52	—	NO58
178	5	CH54	—	NC59
179	7	CH56	—	COM59
180	9	CH58	—	NO59
181	11	CH60	—	NC60
182	13	CH62	—	COM60
183	15	CH64	—	NO60
184	17	CH66	—	NC61
185	32	CH68	—	COM61
186	30	CH70	—	NO61
187	28	CH72	—	NC62
188	26	CH74	—	COM62
189	24	CH76	—	NO62
190	22	CH78	—	NC63
191	20	CH80	—	COM63
192	18	CH82	—	NO63
193	35	CH84	—	NC64
194	37	CH86	—	COM64
195	39	CH88	—	NO64
196	41	CH90	—	NC65
197	43	CH92	—	COM65
198	45	CH94	—	NO65
199	47	CH96	—	—
200	49	CH98	—	—

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Table 4. Pin Assignment for SH200LFH-4xDB50F-C P4

50-Pin D-SUB P4				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
1	50	COM99	—	NO49
2	48	COM97	—	NO48
3	46	COM95	—	NO47
4	44	COM93	—	NO46
5	42	COM91	—	NO45
6	40	COM89	—	NO44
7	38	COM87	—	NO43
8	36	COM85	—	NO42
9	34	COM83	—	NO41
10	19	COM81	—	NO40
11	21	COM79	NO39	NO39
12	23	COM77	NO38	NO38
13	25	COM75	NO37	NO37
14	27	COM73	NO36	NO36
15	29	COM71	NO35	NO35
16	31	COM69	NO34	NO34
17	33	COM67	NO33	NO33
18	16	COM65	NO32	NO32
19	14	COM63	NO31	NO31
20	12	COM61	NO30	NO30
21	10	COM59	NO29	NO29
22	8	COM57	NO28	NO28
23	6	COM55	NO27	NO27
24	4	COM53	NO26	NO26
25	2	COM51	NO25	NO25
76	1	CH51	COM25	COM25

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Table 4. Pin Assignment for SH200LFH-4xDB50F-C P4 (Continued)

50-Pin D-SUB P4				
Cable		PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin			
77	3	CH53	COM26	COM26
78	5	CH55	COM27	COM27
79	7	CH57	COM28	COM28
80	9	CH59	COM29	COM29
81	11	CH61	COM30	COM30
82	13	CH63	COM31	COM31
83	15	CH65	COM32	COM32
84	17	CH67	COM33	COM33
85	32	CH69	COM34	COM34
86	30	CH71	COM35	COM35
87	28	CH73	COM36	COM36
88	26	CH75	COM37	COM37
89	24	CH77	COM38	COM38
90	22	CH79	COM39	COM39
91	20	CH81	—	COM40
92	18	CH83	—	COM41
93	35	CH85	—	COM42
94	37	CH87	—	COM43
95	39	CH89	—	COM44
96	41	CH91	—	COM45
97	43	CH93	—	COM46
98	45	CH95	—	COM47
99	47	CH97	—	COM48
100	49	CH99	—	COM49

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SH200LFH-4xDB50F-S Cable

The SH200LFH-4xDB50F-S cable is recommended for connecting the PXI-2575 or SCXI-1175 to your system. One end of the cable terminates with an LFH200 connector. The other end of the cable terminates with four 50-pin female D-SUB connectors.

When using the SH200LFH-4xDB50F-S cable with the PXI-2575 or SCXI-1175, the positive and negative leads of a channel form a twisted pair. For example, CH36+ is paired with CH36–, and CH71+ is paired with CH71–. Figure 8 illustrates how this pairing relates to the pins on the PXI-2575 or SCXI-1175 modules. Refer to the *NI Switches Help* for a complete listing of channel names and pinouts.

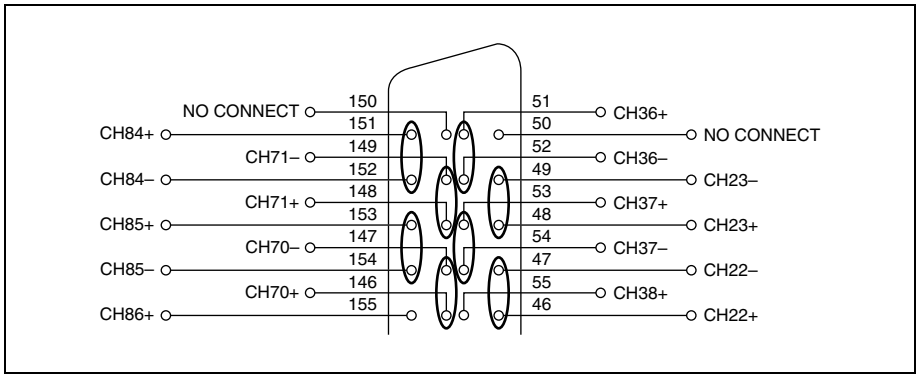


Figure 8. Twisted Pair Groupings for the PXI-2575 or SCXI-1175 modules in 95 × 1, 2-Wire Mode

The following tables list the pin assignments for the SH200LFH-4xDB50F-S cable.

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Table 5. Pin Assignment for SH200LFH-4xDB50F-S P1

50-Pin D-SUB P1								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
1	1	Twisted Pair	COM99	—	CH0	CH0+	CH0+	NO49
2	2		COM97	—	CH95	CH0–	CH0–	NO48
3	3	Twisted Pair	COM95	—	CH1	CH1+	CH1+	NO47
4	4		COM93	—	CH96	CH1–	CH1–	NO46
5	5	Twisted Pair	COM91	—	CH2	CH2+	CH2+	NO45
6	6		COM89	—	CH97	CH2–	CH2–	NO44
7	7	Twisted Pair	COM87	—	CH3	CH3+	CH3+	NO43
8	8		COM85	—	CH98	CH3–	CH3–	NO42
9	9	Twisted Pair	COM83	—	CH4	CH4+	CH4+	NO41
10	10		COM81	—	CH99	CH4–	CH4–	NO40
11	11	Twisted Pair	COM79	NO39	CH5	CH5+	CH5+	NO39
12	12		COM77	NO38	CH100	CH5–	CH5–	NO38
13	13	Twisted Pair	COM75	NO37	CH6	CH6+	CH6+	NO37
14	14		COM73	NO36	CH101	CH6–	CH6–	NO36
15	15	Twisted Pair	COM71	NO35	CH7	CH7+	CH7+	NO35
16	16		COM69	NO34	CH102	CH7–	CH7–	NO34
17	17	Twisted Pair	COM67	NO33	CH8	CH8+	CH8+	NO33
18	18		COM65	NO32	CH103	CH8–	CH8–	NO32
19	19	Twisted Pair	COM63	NO31	CH9	CH9+	CH9+	NO31
20	20		COM61	NO30	CH104	CH9–	CH9–	NO30
21	21	Twisted Pair	COM59	NO29	CH10	CH10+	CH10+	NO29
22	22		COM57	NO28	CH105	CH10–	CH10–	NO28
23	23	Twisted Pair	COM55	NO27	CH11	CH11+	CH11+	NO27
24	24		COM53	NO26	CH106	CH11–	CH11–	NO26
25	25	Not Paired	COM51	NO25	CH194	—	CH96–	NO25

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Table 5. Pin Assignment for SH200LFH-4xDB50F-S P1 (Continued)

50-Pin D-SUB P1								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
26	26	Twisted Pair	COM49	NO24	CH12	CH12+	CH12+	NO24
27	27		COM47	NO23	CH107	CH12–	CH12–	NO23
28	28	Twisted Pair	COM45	NO22	CH13	CH13+	CH13+	NO22
29	29		COM43	NO21	CH108	CH13–	CH13–	NO21
30	30	Twisted Pair	COM41	NO20	CH14	CH14+	CH14+	NO20
31	31		COM39	NO19	CH109	CH14–	CH14–	NO19
32	32	Twisted Pair	COM37	NO18	CH15	CH15+	CH15+	NO18
33	33		COM35	NO17	CH110	CH15–	CH15–	NO17
34	34	Twisted Pair	COM33	NO16	CH16	CH16+	CH16+	NO16
35	35		COM31	NO15	CH111	CH16–	CH16–	NO15
36	36	Twisted Pair	COM29	NO14	CH17	CH17+	CH17+	NO14
37	37		COM27	NO13	CH112	CH17–	CH17–	NO13
38	38	Twisted Pair	COM25	NO12	CH18	CH18+	CH18+	NO12
39	39		COM23	NO11	CH113	CH18–	CH18–	NO11
40	40	Twisted Pair	COM21	NO10	CH19	CH19+	CH19+	NO10
41	41		COM19	NO9	CH114	CH19–	CH19–	NO9
42	42	Twisted Pair	COM17	NO8	CH20	CH20+	CH20+	NO8
43	43		COM15	NO7	CH115	CH20–	CH20–	NO7
44	44	Twisted Pair	COM13	NO6	CH21	CH21+	CH21+	NO6
45	45		COM11	NO5	CH116	CH21–	CH21–	NO5
46	46	Twisted Pair	COM9	NO4	CH22	CH22+	CH22+	NO4
47	47		COM7	NO3	CH117	CH22–	CH22–	NO3
48	48	Twisted Pair	COM5	NO2	CH23	CH23+	CH23+	NO2
49	49		COM3	NO1	CH118	CH23–	CH23–	NO1
50	50	Not Paired	COM1	NO0	—	—	—	NO0

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Table 6. Pin Assignment for SH200LFH-4xDB50F-S P2

50-Pin D-SUB P2								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
51	1	Twisted Pair	CH1	COM0	CH36	CH36+	CH36+	COM0
52	2		CH3	COM1	CH131	CH36–	CH36–	COM1
53	3	Twisted Pair	CH5	COM2	CH37	CH37+	CH37+	COM2
54	4		CH7	COM3	CH132	CH37–	CH37–	COM3
55	5	Twisted Pair	CH9	COM4	CH38	CH38+	CH38+	COM4
56	6		CH11	COM5	CH133	CH38–	CH38–	COM5
57	7	Twisted Pair	CH13	COM6	CH39	CH39+	CH39+	COM6
58	8		CH15	COM7	CH134	CH39–	CH39–	COM7
59	9	Twisted Pair	CH17	COM8	CH40	CH40+	CH40+	COM8
60	10		CH19	COM9	CH135	CH40–	CH40–	COM9
61	11	Twisted Pair	CH21	COM10	CH41	CH41+	CH41+	COM10
62	12		CH23	COM11	CH136	CH41–	CH41–	COM11
63	13	Twisted Pair	CH25	COM12	CH42	CH42+	CH42+	COM12
64	14		CH27	COM13	CH137	CH42–	CH42–	COM13
65	15	Twisted Pair	CH29	COM14	CH43	CH43+	CH43+	COM14
66	16		CH31	COM15	CH138	CH43–	CH43–	COM15
67	17	Twisted Pair	CH33	COM16	CH44	CH44+	CH44+	COM16
68	18		CH35	COM17	CH139	CH44–	CH44–	COM17
69	19	Twisted Pair	CH37	COM18	CH45	CH45+	CH45+	COM18
70	20		CH39	COM19	CH140	CH45–	CH45–	COM19
71	21	Twisted Pair	CH41	COM20	CH46	CH46+	CH46+	COM20
72	22		CH43	COM21	CH141	CH46–	CH46–	COM21
73	23	Twisted Pair	CH45	COM22	CH47	CH47+	CH47+	COM22
74	24		CH47	COM23	CH142	CH47–	CH47–	COM23
75	25	Not Paired	CH49	COM24	CH191	—	CH96+	COM24

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Table 6. Pin Assignment for SH200LFH-4xDB50F-S P2 (Continued)

50-Pin D-SUB P2								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
76	26	Twisted Pair	CH51	COM25	CH24	CH24+	CH24+	COM25
77	27		CH53	COM26	CH119	CH24–	CH24–	COM26
78	28	Twisted Pair	CH55	COM27	CH25	CH25+	CH25+	COM27
79	29		CH57	COM28	CH120	CH25–	CH25–	COM28
80	30	Twisted Pair	CH59	COM29	CH26	CH26+	CH26+	COM29
81	31		CH61	COM30	CH121	CH26–	CH26–	COM30
82	32	Twisted Pair	CH63	COM31	CH27	CH27+	CH27+	COM31
83	33		CH65	COM32	CH122	CH27–	CH27–	COM32
84	34	Twisted Pair	CH67	COM33	CH28	CH28+	CH28+	COM33
85	35		CH69	COM34	CH123	CH28–	CH28–	COM34
86	36	Twisted Pair	CH71	COM35	CH29	CH29+	CH29+	COM35
87	37		CH73	COM36	CH124	CH29–	CH29–	COM36
88	38	Twisted Pair	CH75	COM37	CH30	CH30+	CH30+	COM37
89	39		CH77	COM38	CH125	CH30–	CH30–	COM38
90	40	Twisted Pair	CH79	COM39	CH31	CH31+	CH31+	COM39
91	41		CH81	—	CH126	CH31–	CH31–	COM40
92	42	Twisted Pair	CH83	—	CH32	CH32+	CH32+	COM41
93	43		CH85	—	CH127	CH32–	CH32–	COM42
94	44	Twisted Pair	CH87	—	CH33	CH33+	CH33+	COM43
95	45		CH89	—	CH128	CH33–	CH33–	COM44
96	46	Twisted Pair	CH91	—	CH34	CH34+	CH34+	COM45
97	47		CH93	—	CH129	CH34–	CH34–	COM46
98	48	Twisted Pair	CH95	—	CH35	CH35+	CH35+	COM47
99	49		CH97	—	CH130	CH35–	CH35–	COM48
100	50	Not Paired	CH99	—	CH195	—	CH97–	COM49

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Table 7. Pin Assignment for SH200LFH-4xDB50F-S P3

50-Pin D-SUB P3								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
101	1	Twisted Pair	COM98	—	CH48	CH48+	CH48+	NC49
102	2		COM96	—	CH143	CH48–	CH48–	NC48
103	3	Twisted Pair	COM94	—	CH49	CH49+	CH49+	NC47
104	4		COM92	—	CH144	CH49–	CH49–	NC46
105	5	Twisted Pair	COM90	—	CH50	CH50+	CH50+	NC45
106	6		COM88	—	CH145	CH50–	CH50–	NC44
107	7	Twisted Pair	COM86	—	CH51	CH51+	CH51+	NC43
108	8		COM84	—	CH146	CH51–	CH51–	NC42
109	9	Twisted Pair	COM82	—	CH52	CH52+	CH52+	NC41
110	10		COM80	—	CH147	CH52–	CH52–	NC40
111	11	Twisted Pair	COM78	NC39	CH53	CH53+	CH53+	NC39
112	12		COM76	NC38	CH148	CH53–	CH53–	NC38
113	13	Twisted Pair	COM74	NC37	CH54	CH54+	CH54+	NC37
114	14		COM72	NC36	CH149	CH54–	CH54–	NC36
115	15	Twisted Pair	COM70	NC35	CH55	CH55+	CH55+	NC35
116	16		COM68	NC34	CH150	CH55–	CH55–	NC34
117	17	Twisted Pair	COM66	NC33	CH56	CH56+	CH56+	NC33
118	18		COM64	NC32	CH151	CH56–	CH56–	NC32
119	19	Twisted Pair	COM62	NC31	CH57	CH57+	CH57+	NC31
120	20		COM60	NC30	CH152	CH57–	CH57–	NC30
121	21	Twisted Pair	COM58	NC29	CH58	CH58+	CH58+	NC29
122	22		COM56	NC28	CH153	CH58–	CH58–	NC28
123	23	Twisted Pair	COM54	NC27	CH59	CH59+	CH59+	NC27
124	24		COM52	NC26	CH154	CH59–	CH59–	NC26
125	25	Not Paired	COM50	NC25	CH193	—	CH95–	NC25

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Table 7. Pin Assignment for SH200LFH-4xDB50F-S P3 (Continued)

50-Pin D-SUB P3								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
126	26	Twisted Pair	COM48	NC24	CH60	CH60+	CH60+	NC24
127	27		COM46	NC23	CH155	CH60–	CH60–	NC23
128	28	Twisted Pair	COM44	NC22	CH61	CH61+	CH61+	NC22
129	29		COM42	NC21	CH156	CH61–	CH61–	NC21
130	30	Twisted Pair	COM40	NC20	CH62	CH62+	CH62+	NC20
131	31		COM38	NC19	CH157	CH62–	CH62–	NC19
132	32	Twisted Pair	COM36	NC18	CH63	CH63+	CH63+	NC18
133	33		COM34	NC17	CH158	CH63–	CH63–	NC17
134	34	Twisted Pair	COM32	NC16	CH64	CH64+	CH64+	NC16
135	35		COM30	NC15	CH159	CH64–	CH64–	NC15
136	36	Twisted Pair	COM28	NC14	CH65	CH65+	CH65+	NC14
137	37		COM26	NC13	CH160	CH65–	CH65–	NC13
138	38	Twisted Pair	COM24	NC12	CH66	CH66+	CH66+	NC12
139	39		COM22	NC11	CH161	CH66–	CH66–	NC11
140	40	Twisted Pair	COM20	NC10	CH67	CH67+	CH67+	NC10
141	41		COM18	NC9	CH162	CH67–	CH67–	NC9
142	42	Twisted Pair	COM16	NC8	CH68	CH68+	CH68+	NC8
143	43		COM14	NC7	CH163	CH68–	CH68–	NC7
144	44	Twisted Pair	COM12	NC6	CH69	CH69+	CH69+	NC6
145	45		COM10	NC5	CH164	CH69–	CH69–	NC5
146	46	Twisted Pair	COM8	NC4	CH70	CH70+	CH70+	NC4
147	47		COM6	NC3	CH165	CH70–	CH70–	NC3
148	48	Twisted Pair	COM4	NC2	CH71	CH71+	CH71+	NC2
149	49		COM2	NC1	CH166	CH71–	CH71–	NC1
150	50	Not Paired	COM0	NC0	—	—	—	NC0

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Table 8. Pin Assignment for SH200LFH-4xDB50F-S P4

50-Pin D-SUB P4								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
151	1	Twisted Pair	CH0	—	CH84	CH84+	CH84+	NC50
152	2		CH2	—	CH179	CH84–	CH84–	COM50
153	3	Twisted Pair	CH4	—	CH85	CH85+	CH85+	NO50
154	4		CH6	—	CH180	CH85–	CH85–	NC51
155	5	Twisted Pair	CH8	—	CH86	CH86+	CH86+	COM51
156	6		CH10	—	CH181	CH86–	CH86–	NO51
157	7	Twisted Pair	CH12	—	CH87	CH87+	CH87+	NC52
158	8		CH14	—	CH182	CH87–	CH87–	COM52
159	9	Twisted Pair	CH16	—	CH88	CH88+	CH88+	NO52
160	10		CH18	—	CH183	CH88–	CH88–	NC53
161	11	Twisted Pair	CH20	—	CH89	CH89+	CH89+	COM53
162	12		CH22	—	CH184	CH89–	CH89–	NO53
163	13	Twisted Pair	CH24	—	CH90	CH90+	CH90+	NC54
164	14		CH26	—	CH185	CH90–	CH90–	COM54
165	15	Twisted Pair	CH28	—	CH91	CH91+	CH91+	NO54
166	16		CH30	—	CH186	CH91–	CH91–	NC55
167	17	Twisted Pair	CH32	—	CH92	CH92+	CH92+	COM55
168	18		CH34	—	CH187	CH92–	CH92–	NO55
169	19	Twisted Pair	CH36	—	CH93	CH93+	CH93+	NC56
170	20		CH38	—	CH188	CH93–	CH93–	COM56
171	21	Twisted Pair	CH40	—	CH94	CH94+	CH94+	NO56
172	22		CH42	—	CH189	CH94–	CH94–	NC57
173	23	Twisted Pair	CH44	—	COM	COM+	COM+	COM57
174	24		CH46	—	—	COM–	COM–	NO57
175	25	Not Paired	CH48	—	CH190	—	CH95+	NC58

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Table 8. Pin Assignment for SH200LFH-4xDB50F-S P4 (Continued)

50-Pin D-SUB P4								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
LFH Pin	50-Pin D-SUB Pin	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
176	26	Twisted Pair	CH50	—	CH72	CH72+	CH72+	COM58
177	27		CH52	—	CH167	CH72–	CH72–	NO58
178	28	Twisted Pair	CH54	—	CH73	CH73+	CH73+	NC59
179	29		CH56	—	CH168	CH73–	CH73–	COM59
180	30	Twisted Pair	CH58	—	CH74	CH74+	CH74+	NO59
181	31		CH60	—	CH169	CH74–	CH74–	NC60
182	32	Twisted Pair	CH62	—	CH75	CH75+	CH75+	COM60
183	33		CH64	—	CH170	CH75–	CH75–	NO60
184	34	Twisted Pair	CH66	—	CH76	CH76+	CH76+	NC61
185	35		CH68	—	CH171	CH76–	CH76–	COM61
186	36	Twisted Pair	CH70	—	CH77	CH77+	CH77+	NO61
187	37		CH72	—	CH172	CH77–	CH77–	NC62
188	38	Twisted Pair	CH74	—	CH78	CH78+	CH78+	COM62
189	39		CH76	—	CH173	CH78–	CH78–	NO62
190	40	Twisted Pair	CH78	—	CH79	CH79+	CH79+	NC63
191	41		CH80	—	CH174	CH79–	CH79–	COM63
192	42	Twisted Pair	CH82	—	CH80	CH80+	CH80+	NO63
193	43		CH84	—	CH175	CH80–	CH80–	NC64
194	44	Twisted Pair	CH86	—	CH81	CH81+	CH81+	COM64
195	45		CH88	—	CH176	CH81–	CH81–	NO64
196	46	Twisted Pair	CH90	—	CH82	CH82+	CH82+	NC65
197	47		CH92	—	CH177	CH82–	CH82–	COM65
198	48	Twisted Pair	CH94	—	CH83	CH83+	CH83+	NO65
199	49		CH96	—	CH178	CH83–	CH83–	—
200	50	Not Paired	CH98	—	CH192	—	CH97+	—

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SH200LFH-BARE WIRE Cable

The SH200LFH-BARE WIRE cable is recommended for connecting the switch module to your system if termination other than 50-pin female D-SUB is required. One end of the cable terminates with an LFH200 connector. The other end of the cable has eight bundles of unterminated, tinned, and stripped wires.

The following tables list the pin assignments for the SH200LFH-BARE WIRE cable.

Note The first color listed in the Bare Wire Color column of Tables 9 through 16 is the primary color of the wire. The second color listed is the stripe color.

Note Each of the eight bundles consists of 13 twisted pairs of wires. Only 25 of the wires are used. Therefore, the 26th blue/red wire remains unused and unmentioned in Tables 9 through 16.

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Table 9. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J0

Cable Leg J0								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
1	RED/ORG	Twisted Pair	COM99	—	CH0	CH0+	CH0+	NO49
2	ORG/RED		COM97	—	CH95	CH0–	CH0–	NO48
3	BLU/WHT	Twisted Pair	COM95	—	CH1	CH1+	CH1+	NO47
4	WHT/BLU		COM93	—	CH96	CH1–	CH1–	NO46
5	BRN/RED	Twisted Pair	COM91	—	CH2	CH2+	CH2+	NO45
6	RED/BRN		COM89	—	CH97	CH2–	CH2–	NO44
7	GRY/RED	Twisted Pair	COM87	—	CH3	CH3+	CH3+	NO43
8	RED/GRY		COM85	—	CH98	CH3–	CH3–	NO42
9	BLK/BLU	Twisted Pair	COM83	—	CH4	CH4+	CH4+	NO41
10	BLU/BLK		COM81	—	CH99	CH4–	CH4–	NO40
11	ORG/WHT	Twisted Pair	COM79	NO39	CH5	CH5+	CH5+	NO39
12	WHT/ORG		COM77	NO38	CH100	CH5–	CH5–	NO38
13	BLK/ORG	Twisted Pair	COM75	NO37	CH6	CH6+	CH6+	NO37
14	ORG/BLK		COM73	NO36	CH101	CH6–	CH6–	NO36
15	BLK/GRN	Twisted Pair	COM71	NO35	CH7	CH7+	CH7+	NO35
16	GRN/BLK		COM69	NO34	CH102	CH7–	CH7–	NO34
17	WHT/GRN	Twisted Pair	COM67	NO33	CH8	CH8+	CH8+	NO33
18	GRN/WHT		COM65	NO32	CH103	CH8–	CH8–	NO32
19	WHT/GRY	Twisted Pair	COM63	NO31	CH9	CH9+	CH9+	NO31
20	GRY/WHT		COM61	NO30	CH104	CH9–	CH9–	NO30
21	WHT/BRN	Twisted Pair	COM59	NO29	CH10	CH10+	CH10+	NO29
22	BRN/WHT		COM57	NO28	CH105	CH10–	CH10–	NO28
23	RED/GRN	Twisted Pair	COM55	NO27	CH11	CH11+	CH11+	NO27
24	GRN/RED		COM53	NO26	CH106	CH11–	CH11–	NO26
25	RED/BLU	Not Paired	COM51	NO25	CH194	—	CH96–	NO25

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Table 10. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J1

Cable Leg J1								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
26	RED/ORG	Twisted Pair	COM49	NO24	CH12	CH12+	CH12+	NO24
27	ORG/RED		COM47	NO23	CH107	CH12–	CH12–	NO23
28	BLU/WHT	Twisted Pair	COM45	NO22	CH13	CH13+	CH13+	NO22
29	WHT/BLU		COM43	NO21	CH108	CH13–	CH13–	NO21
30	BRN/RED	Twisted Pair	COM41	NO20	CH14	CH14+	CH14+	NO20
31	RED/BRN		COM39	NO19	CH109	CH14–	CH14–	NO19
32	GRY/RED	Twisted Pair	COM37	NO18	CH15	CH15+	CH15+	NO18
33	RED/GRY		COM35	NO17	CH110	CH15–	CH15–	NO17
34	BLK/BLU	Twisted Pair	COM33	NO16	CH16	CH16+	CH16+	NO16
35	BLU/BLK		COM31	NO15	CH111	CH16–	CH16–	NO15
36	ORG/WHT	Twisted Pair	COM29	NO14	CH17	CH17+	CH17+	NO14
37	WHT/ORG		COM27	NO13	CH112	CH17–	CH17–	NO13
38	BLK/ORG	Twisted Pair	COM25	NO12	CH18	CH18+	CH18+	NO12
39	ORG/BLK		COM23	NO11	CH113	CH18–	CH18–	NO11
40	BLK/GRN	Twisted Pair	COM21	NO10	CH19	CH19+	CH19+	NO10
41	GRN/BLK		COM19	NO9	CH114	CH19–	CH19–	NO9
42	WHT/GRN	Twisted Pair	COM17	NO8	CH20	CH20+	CH20+	NO8
43	GRN/WHT		COM15	NO7	CH115	CH20–	CH20–	NO7
44	WHT/GRY	Twisted Pair	COM13	NO6	CH21	CH21+	CH21+	NO6
45	GRY/WHT		COM11	NO5	CH116	CH21–	CH21–	NO5
46	WHT/BRN	Twisted Pair	COM9	NO4	CH22	CH22+	CH22+	NO4
47	BRN/WHT		COM7	NO3	CH117	CH22–	CH22–	NO3
48	RED/GRN	Twisted Pair	COM5	NO2	CH23	CH23+	CH23+	NO2
49	GRN/RED		COM3	NO1	CH118	CH23–	CH23–	NO1
50	RED/BLU	Not Paired	COM1	NO0	—	—	—	NO0

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Table 11. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J2

Cable Leg J2								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
76	RED/ORG	Twisted Pair	CH51	COM25	CH24	CH24+	CH24+	COM25
77	ORG/RED		CH53	COM26	CH119	CH24–	CH24–	COM26
78	BLU/WHT	Twisted Pair	CH55	COM27	CH25	CH25+	CH25+	COM27
79	WHT/BLU		CH57	COM28	CH120	CH25–	CH25–	COM28
80	BRN/RED	Twisted Pair	CH59	COM29	CH26	CH26+	CH26+	COM29
81	RED/BRN		CH61	COM30	CH121	CH26–	CH26–	COM30
82	GRY/RED	Twisted Pair	CH63	COM31	CH27	CH27+	CH27+	COM31
83	RED/GRY		CH65	COM32	CH122	CH27–	CH27–	COM32
84	BLK/BLU	Twisted Pair	CH67	COM33	CH28	CH28+	CH28+	COM33
85	BLU/BLK		CH69	COM34	CH123	CH28–	CH28–	COM34
86	ORG/WHT	Twisted Pair	CH71	COM35	CH29	CH29+	CH29+	COM35
87	WHT/ORG		CH73	COM36	CH124	CH29–	CH29–	COM36
88	BLK/ORG	Twisted Pair	CH75	COM37	CH30	CH30+	CH30+	COM37
89	ORG/BLK		CH77	COM38	CH125	CH30–	CH30–	COM38
90	BLK/GRN	Twisted Pair	CH79	COM39	CH31	CH31+	CH31+	COM39
91	GRN/BLK		CH81	—	CH126	CH31–	CH31–	COM40
92	WHT/GRN	Twisted Pair	CH83	—	CH32	CH32+	CH32+	COM41
93	GRN/WHT		CH85	—	CH127	CH32–	CH32–	COM42
94	WHT/GRY	Twisted Pair	CH87	—	CH33	CH33+	CH33+	COM43
95	GRY/WHT		CH89	—	CH128	CH33–	CH33–	COM44
96	WHT/BRN	Twisted Pair	CH91	—	CH34	CH34+	CH34+	COM45
97	BRN/WHT		CH93	—	CH129	CH34–	CH34–	COM46
98	RED/GRN	Twisted Pair	CH95	—	CH35	CH35+	CH35+	COM47
99	GRN/RED		CH97	—	CH130	CH35–	CH35–	COM48
100	RED/BLU	Not Paired	CH99	—	CH195	—	CH97–	COM49

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Table 12. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J3

Cable Leg J3								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
51	RED/ORG	Twisted Pair	CH1	COM0	CH36	CH36+	CH36+	COM0
52	ORG/RED		CH3	COM1	CH131	CH36–	CH36–	COM1
53	BLU/WHT	Twisted Pair	CH5	COM2	CH37	CH37+	CH37+	COM2
54	WHT/BLU		CH7	COM3	CH132	CH37–	CH37–	COM3
55	BRN/RED	Twisted Pair	CH9	COM4	CH38	CH38+	CH38+	COM4
56	RED/BRN		CH11	COM5	CH133	CH38–	CH38–	COM5
57	GRY/RED	Twisted Pair	CH13	COM6	CH39	CH39+	CH39+	COM6
58	RED/GRY		CH15	COM7	CH134	CH39–	CH39–	COM7
59	BLK/BLU	Twisted Pair	CH17	COM8	CH40	CH40+	CH40+	COM8
60	BLU/BLK		CH19	COM9	CH135	CH40–	CH40–	COM9
61	ORG/WHT	Twisted Pair	CH21	COM10	CH41	CH41+	CH41+	COM10
62	WHT/ORG		CH23	COM11	CH136	CH41–	CH41–	COM11
63	BLK/ORG	Twisted Pair	CH25	COM12	CH42	CH42+	CH42+	COM12
64	ORG/BLK		CH27	COM13	CH137	CH42–	CH42–	COM13
65	BLK/GRN	Twisted Pair	CH29	COM14	CH43	CH43+	CH43+	COM14
66	GRN/BLK		CH31	COM15	CH138	CH43–	CH43–	COM15
67	WHT/GRN	Twisted Pair	CH33	COM16	CH44	CH44+	CH44+	COM16
68	GRN/WHT		CH35	COM17	CH139	CH44–	CH44–	COM17
69	WHT/GRY	Twisted Pair	CH37	COM18	CH45	CH45+	CH45+	COM18
70	GRY/WHT		CH39	COM19	CH140	CH45–	CH45–	COM19
71	WHT/BRN	Twisted Pair	CH41	COM20	CH46	CH46+	CH46+	COM20
72	BRN/WHT		CH43	COM21	CH141	CH46–	CH46–	COM21
73	RED/GRN	Twisted Pair	CH45	COM22	CH47	CH47+	CH47+	COM22
74	GRN/RED		CH47	COM23	CH142	CH47–	CH47–	COM23
75	RED/BLU	Not Paired	CH49	COM24	CH191	—	CH96+	COM24

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Table 13. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J4

Cable Leg J4								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
101	RED/ORG	Twisted Pair	COM98	—	CH48	CH48+	CH48+	NC49
102	ORG/RED		COM96	—	CH143	CH48–	CH48–	NC48
103	BLU/WHT	Twisted Pair	COM94	—	CH49	CH49+	CH49+	NC47
104	WHT/BLU		COM92	—	CH144	CH49–	CH49–	NC46
105	BRN/RED	Twisted Pair	COM90	—	CH50	CH50+	CH50+	NC45
106	RED/BRN		COM88	—	CH145	CH50–	CH50–	NC44
107	GRY/RED	Twisted Pair	COM86	—	CH51	CH51+	CH51+	NC43
108	RED/GRY		COM84	—	CH146	CH51–	CH51–	NC42
109	BLK/BLU	Twisted Pair	COM82	—	CH52	CH52+	CH52+	NC41
110	BLU/BLK		COM80	—	CH147	CH52–	CH52–	NC40
111	ORG/WHT	Twisted Pair	COM78	NC39	CH53	CH53+	CH53+	NC39
112	WHT/ORG		COM76	NC38	CH148	CH53–	CH53–	NC38
113	BLK/ORG	Twisted Pair	COM74	NC37	CH54	CH54+	CH54+	NC37
114	ORG/BLK		COM72	NC36	CH149	CH54–	CH54–	NC36
115	BLK/GRN	Twisted Pair	COM70	NC35	CH55	CH55+	CH55+	NC35
116	GRN/BLK		COM68	NC34	CH150	CH55–	CH55–	NC34
117	WHT/GRN	Twisted Pair	COM66	NC33	CH56	CH56+	CH56+	NC33
118	GRN/WHT		COM64	NC32	CH151	CH56–	CH56–	NC32
119	WHT/GRY	Twisted Pair	COM62	NC31	CH57	CH57+	CH57+	NC31
120	GRY/WHT		COM60	NC30	CH152	CH57–	CH57–	NC30
121	WHT/BRN	Twisted Pair	COM58	NC29	CH58	CH58+	CH58+	NC29
122	BRN/WHT		COM56	NC28	CH153	CH58–	CH58–	NC28
123	RED/GRN	Twisted Pair	COM54	NC27	CH59	CH59+	CH59+	NC27
124	GRN/RED		COM52	NC26	CH154	CH59–	CH59–	NC26
125	RED/BLU	Not Paired	COM50	NC25	CH193	—	CH95–	NC25

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Table 14. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J5

Cable Leg J5								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196×1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
126	RED/ORG	Twisted Pair	COM48	NC24	CH60	CH60+	CH60+	NC24
127	ORG/RED		COM46	NC23	CH155	CH60–	CH60–	NC23
128	BLU/WHT	Twisted Pair	COM44	NC22	CH61	CH61+	CH61+	NC22
129	WHT/BLU		COM42	NC21	CH156	CH61–	CH61–	NC21
130	BRN/RED	Twisted Pair	COM40	NC20	CH62	CH62+	CH62+	NC20
131	RED/BRN		COM38	NC19	CH157	CH62–	CH62–	NC19
132	GRY/RED	Twisted Pair	COM36	NC18	CH63	CH63+	CH63+	NC18
133	RED/GRY		COM34	NC17	CH158	CH63–	CH63–	NC17
134	BLK/BLU	Twisted Pair	COM32	NC16	CH64	CH64+	CH64+	NC16
135	BLU/BLK		COM30	NC15	CH159	CH64–	CH64–	NC15
136	ORG/WHT	Twisted Pair	COM28	NC14	CH65	CH65+	CH65+	NC14
137	WHT/ORG		COM26	NC13	CH160	CH65–	CH65–	NC13
138	BLK/ORG	Twisted Pair	COM24	NC12	CH66	CH66+	CH66+	NC12
139	ORG/BLK		COM22	NC11	CH161	CH66–	CH66–	NC11
140	BLK/GRN	Twisted Pair	COM20	NC10	CH67	CH67+	CH67+	NC10
141	GRN/BLK		COM18	NC9	CH162	CH67–	CH67–	NC9
142	WHT/GRN	Twisted Pair	COM16	NC8	CH68	CH68+	CH68+	NC8
143	GRN/WHT		COM14	NC7	CH163	CH68–	CH68–	NC7
144	WHT/GRY	Twisted Pair	COM12	NC6	CH69	CH69+	CH69+	NC6
145	GRY/WHT		COM10	NC5	CH164	CH69–	CH69–	NC5
146	WHT/BRN	Twisted Pair	COM8	NC4	CH70	CH70+	CH70+	NC4
147	BRN/WHT		COM6	NC3	CH165	CH70–	CH70–	NC3
148	RED/GRN	Twisted Pair	COM4	NC2	CH71	CH71+	CH71+	NC2
149	GRN/RED		COM2	NC1	CH166	CH71–	CH71–	NC1
150	RED/BLU	Not Paired	COM0	NC0	—	—	—	NC0

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Table 15. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J6

Cable Leg J6								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
176	RED/ORG	Twisted Pair	CH50	—	CH72	CH72+	CH72+	COM58
177	ORG/RED		CH52	—	CH167	CH72–	CH72–	NO58
178	BLU/WHT	Twisted Pair	CH54	—	CH73	CH73+	CH73+	NC59
179	WHT/BLU		CH56	—	CH168	CH73–	CH73–	COM59
180	BRN/RED	Twisted Pair	CH58	—	CH74	CH74+	CH74+	NO59
181	RED/BRN		CH60	—	CH169	CH74–	CH74–	NC60
182	GRY/RED	Twisted Pair	CH62	—	CH75	CH75+	CH75+	COM60
183	RED/GRY		CH64	—	CH170	CH75–	CH75–	NO60
184	BLK/BLU	Twisted Pair	CH66	—	CH76	CH76+	CH76+	NC61
185	BLU/BLK		CH68	—	CH171	CH76–	CH76–	COM61
186	ORG/WHT	Twisted Pair	CH70	—	CH77	CH77+	CH77+	NO61
187	WHT/ORG		CH72	—	CH172	CH77–	CH77–	NC62
188	BLK/ORG	Twisted Pair	CH74	—	CH78	CH78+	CH78+	COM62
189	ORG/BLK		CH76	—	CH173	CH78–	CH78–	NO62
190	BLK/GRN	Twisted Pair	CH78	—	CH79	CH79+	CH79+	NC63
191	GRN/BLK		CH80	—	CH174	CH79–	CH79–	COM63
192	WHT/GRN	Twisted Pair	CH82	—	CH80	CH80+	CH80+	NO63
193	GRN/WHT		CH84	—	CH175	CH80–	CH80–	NC64
194	WHT/GRY	Twisted Pair	CH86	—	CH81	CH81+	CH81+	COM64
195	GRY/WHT		CH88	—	CH176	CH81–	CH81–	NO64
196	WHT/BRN	Twisted Pair	CH90	—	CH82	CH82+	CH82+	NC65
197	BRN/WHT		CH92	—	CH177	CH82–	CH82–	COM65
198	RED/GRN	Twisted Pair	CH94	—	CH83	CH83+	CH83+	NO65
199	GRN/RED		CH96	—	CH178	CH83–	CH83–	—
200	RED/BLU	Not Paired	CH98	—	CH192	—	CH97+	—

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Table 16. Pin Assignment for SH200LFH-BARE WIRE Cable Leg J7

Cable Leg J7								
Cable			PXI-2569, SCXI-1169 Channel	PXI-2570 Channel	PXI-2575, SCXI-1175			PXI-2571 Channel
200 LFH Pin	Bare Wire Color	Pair?			196 × 1 1-Wire	95 × 1 2-Wire	98 × 1 2-Wire	
151	RED/ORG	Twisted Pair	CH0	—	CH84	CH84+	CH84+	NC50
152	ORG/RED		CH2	—	CH179	CH84–	CH84–	COM50
153	BLU/WHT	Twisted Pair	CH4	—	CH85	CH85+	CH85+	NO50
154	WHT/BLU		CH6	—	CH180	CH85–	CH85–	NC51
155	BRN/RED	Twisted Pair	CH8	—	CH86	CH86+	CH86+	COM51
156	RED/BRN		CH10	—	CH181	CH86–	CH86–	NO51
157	GRY/RED	Twisted Pair	CH12	—	CH87	CH87+	CH87+	NC52
158	RED/GRY		CH14	—	CH182	CH87–	CH87–	COM52
159	BLK/BLU	Twisted Pair	CH16	—	CH88	CH88+	CH88+	NO52
160	BLU/BLK		CH18	—	CH183	CH88–	CH88–	NC53
161	ORG/WHT	Twisted Pair	CH20	—	CH89	CH89+	CH89+	COM53
162	WHT/ORG		CH22	—	CH184	CH89–	CH89–	NO53
163	BLK/ORG	Twisted Pair	CH24	—	CH90	CH90+	CH90+	NC54
164	ORG/BLK		CH26	—	CH185	CH90–	CH90–	COM54
165	BLK/GRN	Twisted Pair	CH28	—	CH91	CH91+	CH91+	NO54
166	GRN/BLK		CH30	—	CH186	CH91–	CH91–	NC55
167	WHT/GRN	Twisted Pair	CH32	—	CH92	CH92+	CH92+	COM55
168	GRN/WHT		CH34	—	CH187	CH92–	CH92–	NO55
169	WHT/GRY	Twisted Pair	CH36	—	CH93	CH93+	CH93+	NC56
170	GRY/WHT		CH38	—	CH188	CH93–	CH93–	COM56
171	WHT/BRN	Twisted Pair	CH40	—	CH94	CH94+	CH94+	NO56
172	BRN/WHT		CH42	—	CH189	CH94–	CH94–	NC57
173	RED/GRN	Twisted Pair	CH44	—	COM	COM+	COM+	COM57
174	GRN/RED		CH46	—	—	COM–	COM–	NO57
175	RED/BLU	Not Paired	CH48	—	CH190	—	CH95+	NC58

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Accessories

Visit `ni.com` for information about the following accessory.

Table 17. NI Accessory for the LFH200 Cable

Accessory	Part Number
TBX-50 terminal block, with screw connection and 50 position D-Subminiature pin strip	779305-01

Caution You must install mating connectors according to local safety codes and standards and according to the specifications provided by the connector manufacturer. You are responsible for verifying safety compliance of third-party connectors and their usage according to the relevant standard(s), including UL and CSA in North America and IEC and VDE in Europe.

Refer to Table 18 for information about third-party accessories for the LFH200 Cable.

Table 18. Third-Party Accessories for the LFH200 Cable

Accessory	Manufacturer	Part Number
VARIOFACE module, with screw connection and 50 position D-Subminiature pin strip	Phoenix Contact	FLKM-D50 SUB/S
VARIOFACE module, with screw connection and 50 position D-Subminiature pin strip	Phoenix Contact	FLKMS-D50 SUB/S
VARIOFACE module, with screw connection and 50 position D-Subminiature pin strip, with LED indicators	Phoenix Contact	FLKM-D50 SUB/S/LA
Right-angle 50 position male D-SUB connector*	Amp	747497-4
* Small quantity orders are available from Digi-Key Corporation (part number A23398-ND).		

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Specifications

The following specifications list properties of the multi-conductor cable used to fabricate the LFH200 cable.

Maximum voltage ..... 60 VDC, CAT I

Impedance

- Differential ..... 100 ±15 Ω
- Single-ended ..... 65 ±15 Ω

Capacitance

- Mutual ..... 15.0 pF/ft nominal
- Single-ended ..... 25.0 pF/ft nominal

Time delay ..... 1.60 ns/ft maximum

Time delay skew ..... 0.040 ns/ft maximum

Attenuation

- Differential ..... 0.025 dB/ft maximum at 5 MHz
- Single-ended ..... 0.085 dB/ft maximum at 50 MHz

Conductor DC resistance ..... 0.070 Ω/ft maximum at 20 °C

Gauge ..... 28 AWG

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